



2004 Energy Commission Integrated Energy Policy Report Update

IEPR Committee:

Commissioner John L. Geesman, Presiding Member

Commissioner James D. Boyd, Associate Member

Kevin Kennedy, Program Manager

Sandra Fromm, Assistant Program Manager



Energy Report Process

Senate Bill 1389

Integrated policy development

- Policy recommendations will be made based on an in depth and integrated analysis of energy issues facing the state. (Pub. Res. Code 25302(b))

Common information base for energy agencies

- The state's energy agencies will use the information and analyses contained in the report to carry out their energy-related duties. (Pub. Res. Code 25302(f))

Timing

- A policy report that includes an in depth assessment and forecasts of all energy sectors will be adopted by the Energy Commission every two years, and a supplement to the previous energy report on specific issues will be adopted in the off years.



2004 Draft Energy Report

Collaborated with state agencies and met with stakeholders

19 public workshops and hearings

230 public comments docketed

Three staff reports plus appendices

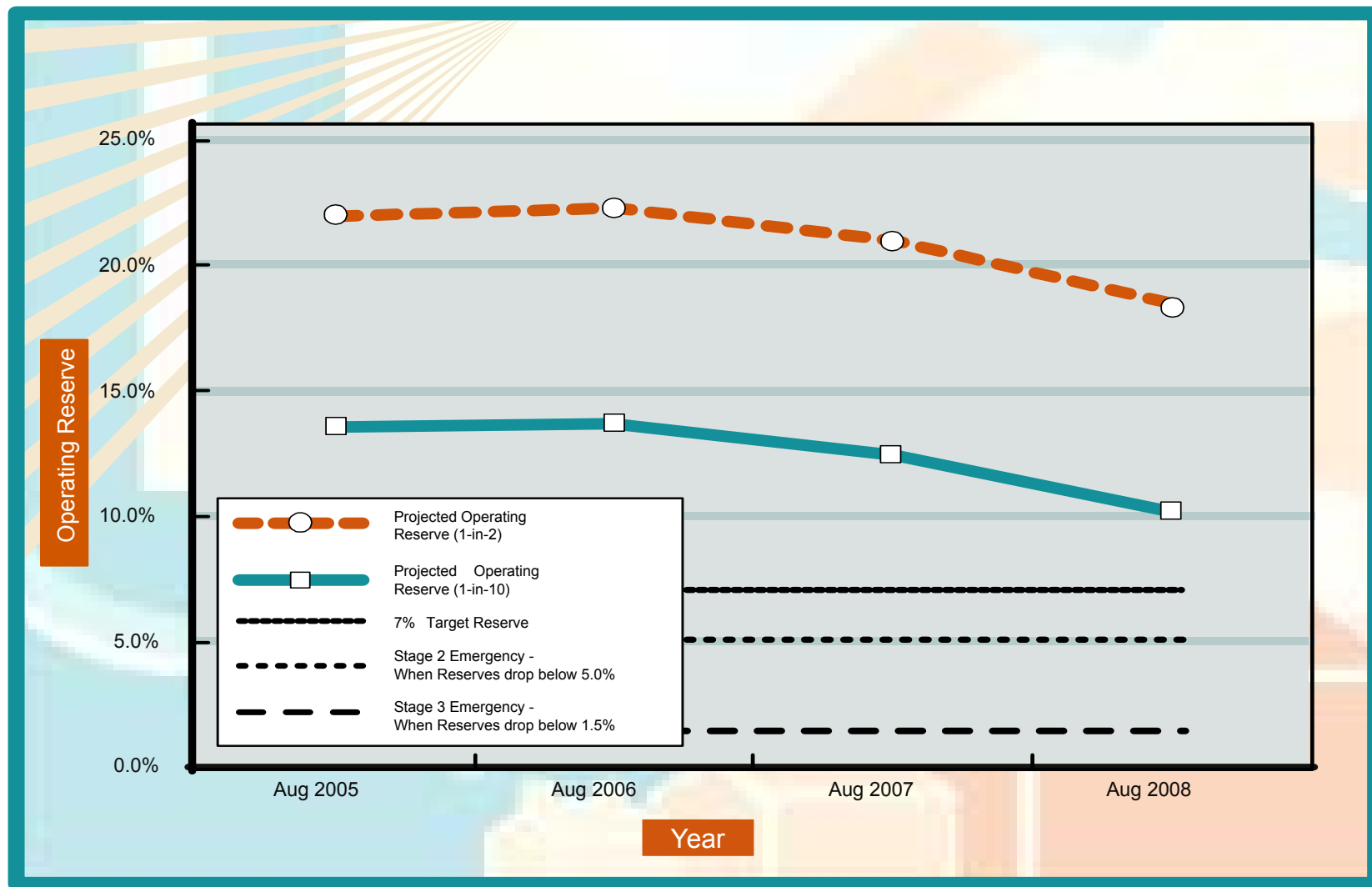
- Resource and Reliability and Environmental Concerns of Aging Power Plant Operations and Retirements
- Upgrading California's Electric Transmission System
- Accelerated Renewable Energy Development

Draft Energy Commission Policy Document

- Released October 20, 2004

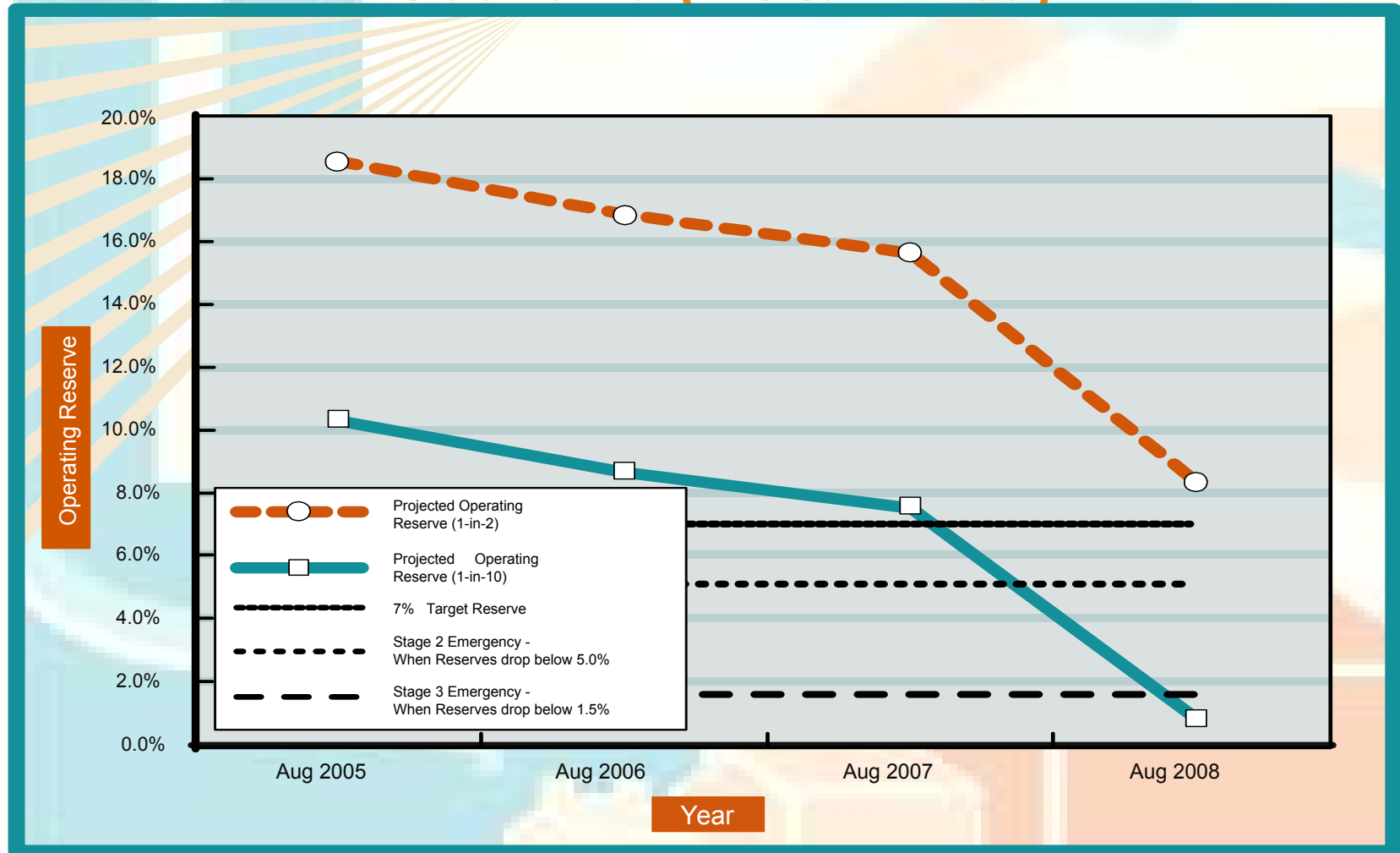
AGING POWER PLANTS

2005-2008 Base Case Scenario (PG&E Area)



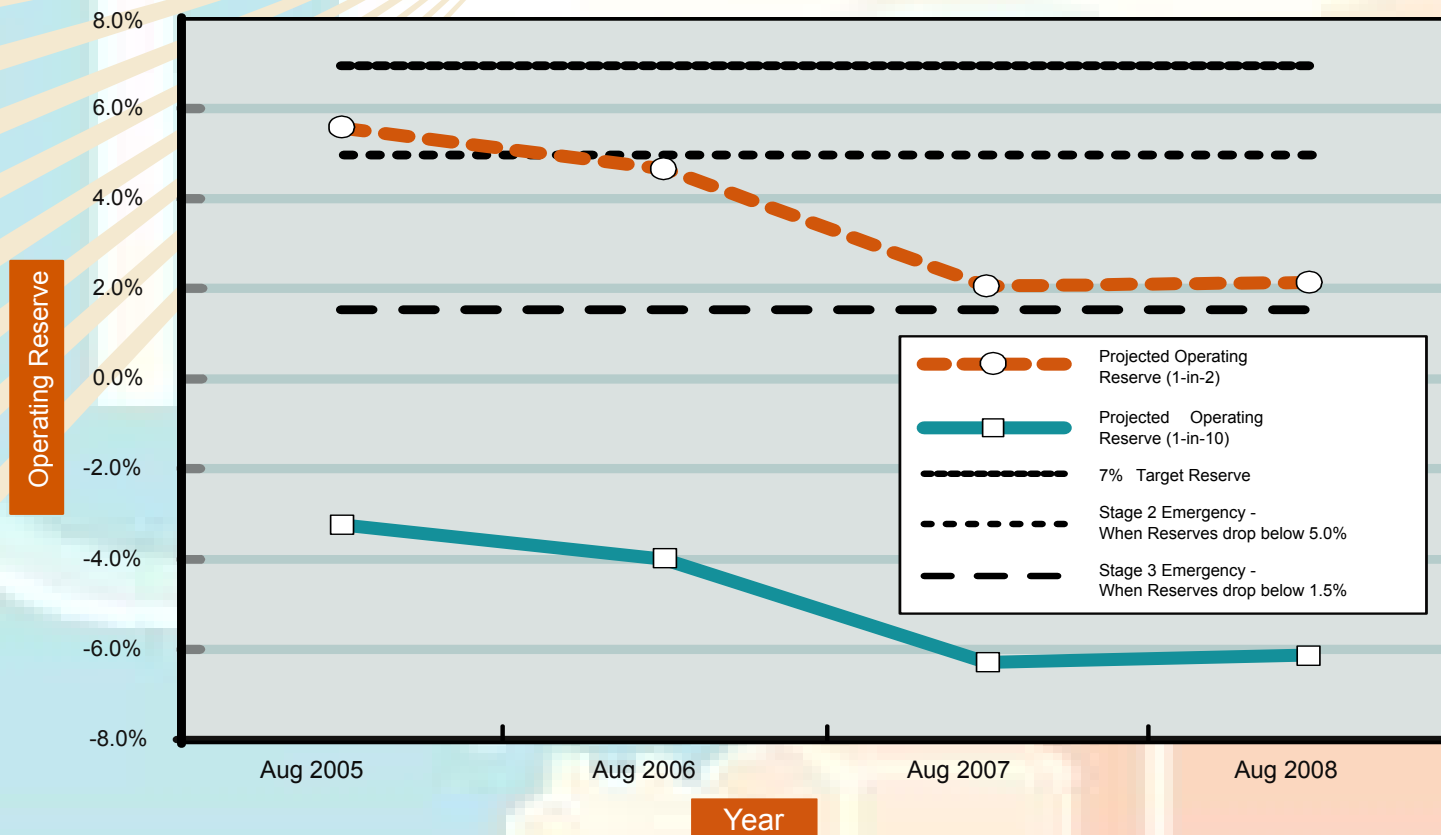
AGING POWER PLANTS

2005-2008 Medium-to-High Risk Retirement Scenario (PG&E Area)



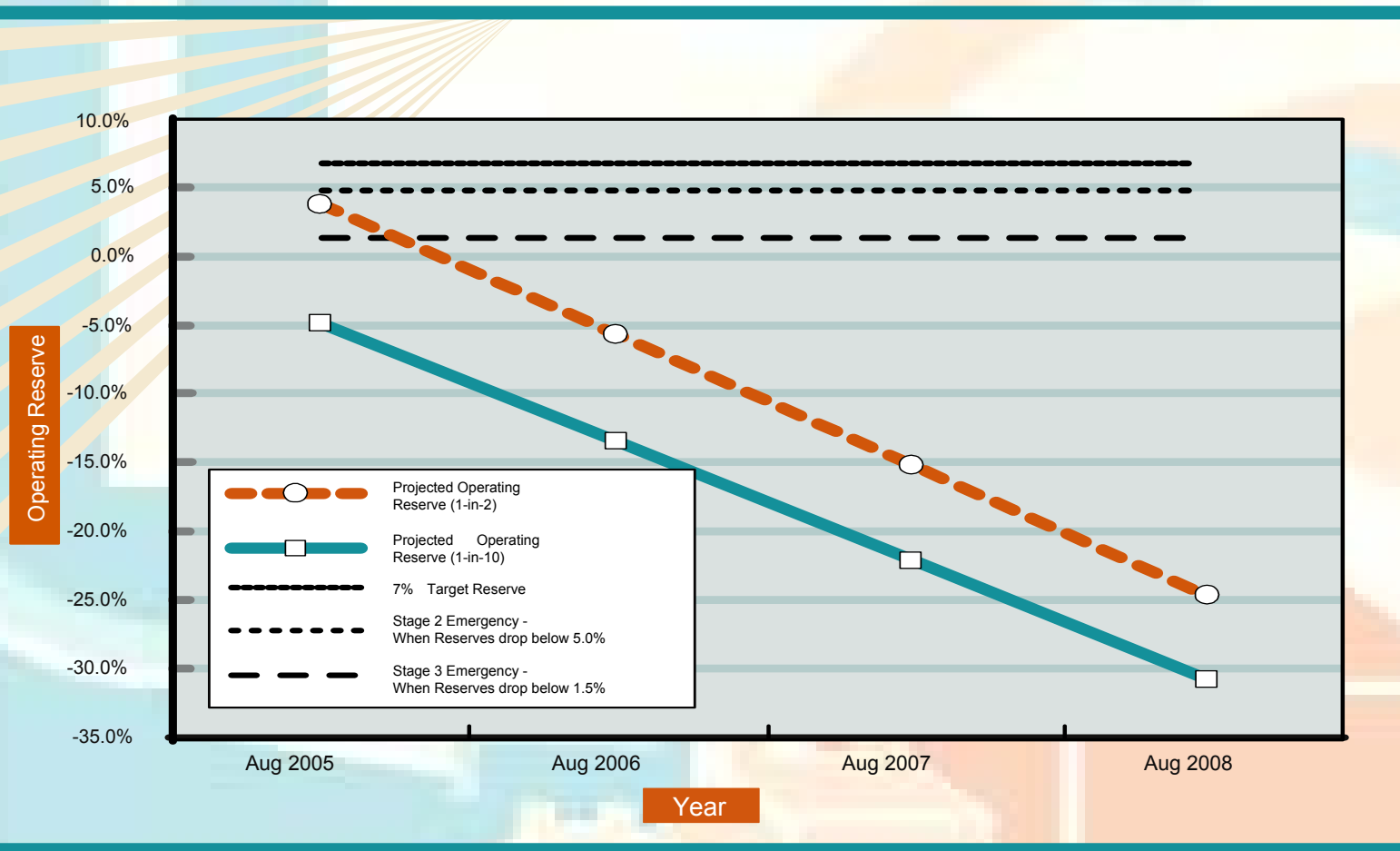
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2005-2008 Base Case Scenario (SCE & SDG&E Areas)



AGING POWER PLANTS

2005-2008 Medium-to-High Risk Retirement Scenario (SCE & SDG&E Areas)



AGING POWER PLANTS

Principal Recommendations

All investor-owned (IOUs) and municipal utilities should work aggressively to attain the 2007 statewide goal of 7% peak demand reduction.

- The California Public Utilities Commission (PUC) should immediately require dynamic pricing tariffs for large electricity customers with established advanced metering capability. Beginning in 2005, the PUC should modify the tariff to expand program eligibility.
- The PUC should implement large scale rollout of advanced metering systems for smaller customers. Dynamic rate offerings and load control options should be developed for customers as metering systems become operational.
- The Energy Commission should work with Department of Water Resources and other water agencies to investigate and pursue cost effective load management and demand response programs.



AGING POWER PLANTS

Principal Recommendations

The Energy Commission should work with the Public Utilities Commission to develop a capacity market.

- The capacity market should include a capacity “tagging” mechanism and tradeable capacity rights.
- California should examine the link between the CA ISO transmission expansion process and local reliability assessment to stimulate adequate investment in a more robust transmission system. This will help California transition away from reliability must-run contracts.
- The Energy Commission should support the pending Pacific Gas & Electric (PG&E) and TURN petition at the CPUC to allow utilities to enter 1-5 year power purchase contracts.
- The CPUC, the IOUs, and municipal utilities should consider allowing cold standby plants to contribute to reserve margins.



AGING POWER PLANTS

Principal Recommendations

The Energy Commission, CPUC, and all utilities should enhance supply management by:

- Establishing more closely coordinated planning and reserve sharing among IOU's and municipal utility service areas. This allows sharing of generating resources.
- Identify and alleviate transmission barriers to sharing generation reserves
- Pursuing cost effective seasonal exchanges with the Pacific Northwest to satisfy summer peak demand, including transmission upgrades to take advantage of seasonal generation surpluses.
- Exploring opportunities to use existing pumped storage facilities more fully to provide a stable base load for existing power plants and peaking power.



TRANSMISSION

Principal Recommendations

Pursuant to SB 1565, the Energy Commission should establish a comprehensive statewide transmission planning process. The process should:

- Assess statewide transmission needs for reliability and economic projects as well as support renewable portfolio standard goals
- Examine non-wires alternatives to transmission (demand response, energy efficiency, generation, etc.)
- Approve transmission infrastructure investments that can move into permitting
 - ❖ The Commission should work with the PUC, CA ISO, state/federal agencies, local/regional planning agencies, investor-owned/municipal utilities, generation owners/developers, stakeholders, interest groups and the public to develop the planning process.



TRANSMISSION

Principal Recommendations

The transmission planning process should:

- Examine the right-of-way needs for future transmission projects, designate and conduct environmental reviews of needed corridors, and allow utilities to set aside or bank necessary land for longer periods of time than currently allowed
- Assess transmission costs and benefits that recognize the 30-50 year useful life of transmission assets, incorporate methods to assess the long-term strategic benefits of transmission and use an appropriate social discount rate



TRANSMISSION

Principal Recommendations

To facilitate transmission and renewable projects, the Energy Commission should:

- Increase its participation in the Joint Transmission Study Group on the Tehachapi Wind Resources Area.
- Work with the CPUC to establish a Joint Transmission Study Group for Imperial County's Geothermal Resource Area.
- Work with the CPUC and CA ISO to investigate whether changes are needed to the Ca ISO tariff to encourage transmission projects necessary to commercialize renewable resources.



RENEWABLES

Principal Recommendations

The state should enact legislation:

- To codify that all retail suppliers of electricity, including large publicly owned electric utilities meet the accelerated 20 percent eligible renewable goal by 2010 and 33% by 2020.
- That allows the CPUC to require Southern California Edison (SCE) to purchase at least 1 percent of additional renewable energy per year between 2006 and 2020, reaching 25% by 2010, 30% by 2015, and 35% by 2020.

RENEWABLES

Principal Recommendations

The Commission recommends:

- Wind turbines be repowered to harness wind resources efficiently and prevent bird deaths.
 - ❖ Local permitting agencies should implement methodologies similar to those recommended in the Energy Commission's bird mortality reduction report.
 - Removal of the repowering clause in the U.S. Tax Code along with along with the recent extension of 2005 the Federal Production Tax Credit will help prospects for wind projects.
- The CPUC should require investor owned utilities to facilitate repowerings in its pending effort to develop renegotiated qualifying facilities (QFs) contracts.

RENEWABLES

Principal Recommendations

To guide development of the Governor's million solar roofs proposal, the Energy Commission recommends that the program:

- Establish comprehensive solar program that includes new/existing homes and businesses
- Leverage energy efficiency improvements for new/existing buildings
- Address peak demand challenges by linking photovoltaic (PV) installation with price responsive tariffs and advanced metering

RENEWABLES

Principal Recommendations

To guide development of the Governor's million solar roofs proposal, the Energy Commission recommends that the program:

- Target PV deployment to climate zones with high peak demand
- Provide long-term declining incentives to promote a sustainable, competitive PV market
- Explore a business role in PV deployment for utilities and develop inspection capability



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